

DRAFT
SUISUN MARSH:
A BRIEF HISTORICAL OVERVIEW

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Man's relationship to the Suisun Marsh through history has been largely dictated by its geography and water regimen. The Marsh historically was a flat coastal brackish marsh laced with sloughs and river channels -- often bordered with natural levees. It is the extreme western area of the river delta created by the Sacramento and San Joaquin Rivers which meet just to the east of the Marsh. Instead of fanning out and dispersing, this unusual delta area constricts as it approaches San Francisco Bay by way of the Carquinez Strait. About forty percent of California's entire natural freshwater runoff historically passed through the delta area. The delta area, including Suisun Marsh, was historically susceptible to inundation both by water carried to the sea from the Central Valley of California and from high tides. When flooded the delta area was a watery expanse dotted with occasional small low islands and Indian mounds.

The natural vegetation of the delta was comparatively flat country covered with dense growths of reeds, tule rushes, sedge, coarse grasses, and other hydrophytic vegetation which pioneer settlers generally simply referred to as "tules." The organic debris from these plants built organically rich peat soil on the delta.¹

While the Spanish entered Alta California in 1769, it was 1775 before Cañizares explored the area of Suisun Bay.² In 1776 Casptain Juan Bautista de Anza explored the area of Suisun Marsh. On the delta the Spanish found an American Indian population. In 1817 they sent Lietutenant Jose Sanchez with a small force to conquer the Suisun tribe.³ Before and after 1817 the Indian population did little to modify the land and certainly did not seek to substantially modify the waterscape of the delta area. The Indians and Mexican inhabitants in the area simply settled in spots near water supplies which suited their needs and tastes. In a few limited instances Spaniards and Mexicans in California did begin to transport water for their purposes. They did this on the basis of a hydraulic tradition stretching back to the Roman Empire, but in early California history their hydraulic modification needs were fairly simple. Settlement patterns in California and the Marsh area were sparse.⁴

In the early 1830s settlers had not arrived in the delta area. A Hudson's Bay Company party visited

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the area in 1832 and an infected member of the party introduced sporozoan parasites into the anopheles mosquitos of the area. Those parasites cause malaria and the newly introduced disease quickly reached epidemic proportions and savaged the native american population of the delta area in 1832-3.⁵

At the turn of the decade, however, interest in the Suisun Marsh area began to increase, and three Mexican land grants were given. Francisco Solano petitioned for the Suisun Grant in January of 1837, and the grant was ultimately dated January 28, 1842. In 1840 José Francisco Armijo sought the Tolenas Grant [of which 13,315 acres were patented to his son in 1868]. That grant was bought by General Mariano de Guadalupe Vallejo. Then in 1842 Juan Manuel Vaca (Baca) and Juan Felipe Peña petitioned General Vallejo for the Los Putos or Lihuaytos Grant. The grant was ultimately given a U. S. patent in 1858 for 44,384 acres -- most of which had been sold by 1879. The Los Putos Grant bordered the northern edge of Suisun Marsh while the Tolenas and Suisun Grants bordered the northern and northeastern edges of the Marsh.⁶

While the land grants were all given in the Mexican period, it was only during and after the period of the Bear Flag Republic (184_ to 18__) that settlements began to appear in the area of Suisun Marsh. Benicia was established in 1847, and a ferry across the Carquinez Strait was established in the same year. It was the transfer of California to the United States combined with the discovery of gold in California, however, which greatly accelerated settlement of the delta area. One description of the delta area at that time stated that

The whole country was at that time filled with wild game. Hundreds of elk could be seen in a single herd, and antelope were equally numerous, while great flocks of wild geese covered thousands of acres of ground at a time. Deer were plentiful and quite tame. . . . And I must not forget to mention that royal beast, the monarch of them all, the great grizzly bear. . . .⁷

The grizzly bears of the region are remembered through the name of Grizzly Island in the Suisun Marsh.

That situation, however, was soon to change. By the mid-1850s Anglo settlers were purchasing portions of the Los Putos Grant and other Anglo-surnamed settlers were in the area. Many people came for the gold rush but stayed to farm the lands and make their living selling to the gold rush settlements. Solano County, which contains the Suisun Marsh, was first created in 1850 and achieved its final form in 1857.⁸

Settlements in the area appeared quickly beginning with Suisun City which appeared about 1850,

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and steps to establish Vacaville began in 1850. Manuel Vaca deeded nine square miles of the Los Putos Grant (by then known as Rancho Los Putos) to William McDaniel in August of 1850. In return, Vaca received \$3,000, a promise to found the town of Vacaville, and some city lots in Vacaville. The town was platted in 1851 and formally established in 1852.⁹

Henry Waterman built his home in the Suisun Valley in 1852 and became active in town development in the area. He is an interesting historical figure because he captained the famous clipper ship Sea Witch before moving to California. In 1853 he founded the town of Cordelia which he originally named Bridgeport after a Connecticut town. The town was renamed for Waterman's wife in 1869. Brazos de Rio was founded in 1857 by N. H. Davis, swept away by the Sacramento River in January of 1862, and subsequently known as Rio Vista. Rio Vista later became a major salmon fishery center on the Sacramento River.¹⁰ In 1859 Waterman founded Fairfield which he named for his hometown in Connecticut. Rockville was another town in the area which was established before 1860. Vallejo near the mouth of the Strait of Carquinez was laid out in 1868 though Commodore John Sloat had selected adjacent Mare Island as a naval base in 1852.¹¹ It was clear, however, that major settlements would not be built in the Marsh, instead they clustered around the periphery of it.

The Suisun Marsh area was affected by many earthquakes of the area: March 15, 1860, March 5, 1864; March 8, 1865; March 26, 1872; April 19 and 21, 1892; 1906; March 8, 1937; and March 27, 1957.¹²

Transportation around the Suisun Marsh was largely by water routes though the Pony Express route skirted the Marsh in 1860-61, and the California Pacific Rail Road Company line connected the Central Pacific in Sacramento to steamship connections to Vallejo in about 1870. By that time, though, the U. S. Corps of Engineers was already removing snags from Central Valley rivers to improve navigability. Until the 1910s, when automobiles and trucks influenced transportation, the roads of the area were few and primitive, making land travel difficult. By steamship, the trip from San Francisco to Sacramento was 125 miles. There were several transportation companies which ran steamships providing transportation to the delta area, and they would land at the numerous small and large landings when called upon to do so. Lesser transportation facilities included smaller steamboats, barges, launches, and sailing schooners. Some of the smaller landings

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were simply piles of brush or other material on the shore. Gasoline launches were used, especially from about 1900 into the 1920s, to provide service to the more out-of-the-way areas of the delta. In the meantime, further railroad development occurred in the area from about 1900 to World War I and resulted in improved transportation for the area as well as reduced shipping costs for products. In the 1920s the truck replaced transport by water and horse and wagon. That was made possible because improved roads, ferries, and bridges offered an alternative transportation pattern for the delta area. November 1941 saw the last run of steamships on the Sacramento to San Francisco run when the Delta King and Delta Queen retired from service.¹³

It is always dangerous to generalize one area's history from another nearby area's, but for the most part the development of Suisun Marsh has not been dealt with in accessible secondary sources. History researchers have devoted considerable energy to the eastern area of the delta but not to Suisun Marsh. As a result, we must presume that Suisun Marsh shared a similar, if not identical, history with the rest of the Sacramento River-San Joaquin River Delta.

The primary economic activities of the Central Valley area of California in the later Nineteenth Century concentrated on natural resources exploitation like mining, farming, and lumbering. Soon after the gold rush began in 1848-9, a tension developed between the delta and the mining industry. Hydraulic mining dumped huge loads of soil, sand, and gravel into the river system, and that material travelled as far as the delta. There sedimentation increased, and the rivers began to rise in their own beds. The delta became choked, and channels narrowed. During low flows the sedimentation caused problems for water traffic by slowing or halting navigation, and during high flows it caused problems for agricultural developments through flooding of the land. In 1878 and 1881, for instance, there was serious flooding in the delta, at least partially because of mining debris. That problem did not begin to improve until after 1884 when placer mines were enjoined from discharging or dumping any mining debris into the Yuba River and its tributaries. Agricultural reclamation work was encouraged by this prohibition, and part of the work included a complicated system of bypasses to carry flood waters around improved lands.¹⁴

Though the lands of the delta were not immediately perceived as agricultural areas, it was quickly

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learned that the peat soils were extremely rich. They were identified as a prize, and they were available. The Arkansas Act of 1850 gave the states swamp and overflow lands. California used that act to eventually receive 2,191,000 acres, and most of those lands were sold by 1871. That is evidenced by the fact that by 1877 even the heart of the Suisun Marsh was owned privately.¹⁵ California's sales policies for these lands tended to favor large holdings, and the western area of the delta in Solano County did tend to have larger farms in the center of the islands there.¹⁶

In addition to its rich soils, the delta had other advantages. The area supported up to four crops a year, the area didn't suffer from droughts, and the maze of waterways offered relatively cheap crops transportation. Those advantages were somewhat offset by the high development costs for reclaiming lands for agricultural use. Levee construction, draining, land clearing, preparation of ground, and sowing were major undertakings on peat soils. The soils did not support humans, animals, or equipment well, and as the soils dried out they subsided so that they were below sea level.

First levees had to be built to prevent flood waters overflowing agricultural lands. At first that was done by laborers, often Chinese, who used wheelbarrows and were paid by the cubic yard of material placed. Later clamshell and other dredges did the work much more economically. Once the levees were in place the "tules" had to be removed. Burning was the best technique, but it was also tricky. Workers could be caught by the fire in "tules" which were often well above the height of a man, and the peat soil could catch fire too. Once the tules were removed, it was necessary to plow the soil which was still bound by the tough woody roots of the tules. Removing clumps or clods of the soil required three plowings with special extra-sharp blades, and during all of this work the virgin soil didn't really support the weight of horses well. More than one unfortunate animal was simply sucked into the muck. Much of this work required hand labor, and the Chinese became a fixture of delta agriculture. They participated in all stages of delta agriculture from levee construction to tule removal, breaking the soil, farming the land, harvesting, and packing crops. As a result, the delta became one of the most productive agricultural areas in the State of California. A final problem that developed was that after the peat soils had been worked for several years they became extremely fine. That fine soil became all pervasive invading clothing and structures. It was so bad that it couldn't really be

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completely washed away, and only a few ethnic groups willingly worked and lived behind the levees.¹⁷

By 1890 about 177,000 acres of lands were reclaimed in the whole delta while that figure reached about 441,000 acres in 1930. The 1920s were the final decade of land reclamation in the delta area. Always a major problem, levee maintenance and recovery of flooded lands became the primary problems for landowners.¹⁸

The major crops of the delta from the 1920s to the 1950s were: alfalfa, asparagus, beans, corn, pasture, potatoes, small grains, and sugar beets. There were also feed lots for cattle and sheep. Dairy farming was down in importance in that period. The larger tracts in the western area of the delta tended to grow grain, potatoes, beans, and asparagus.¹⁹

The sequence of events in the Marsh has varied somewhat from that in the remainder of the delta. At first the Marsh was reclaimed for agricultural uses. Among the crops in the Marsh were truck gardening of asparagus, carrots, and beans; field corn; sugar beets; small grain, and alfalfa. Farmers flooded fields through the levees at high tide.

Dairying was a major activity in this area of the delta, and much of the milk was separated so that the cream could be sent to a creamery while the milk fed calves and pigs. There was a creamery in Suisun that sent a boat to collect the products of the dairy farms. Another, the White Rose Creamery, was near Dutton's Landing on Grizzly Island. The boat from the Suisun creamery also delivered groceries which the residents ordered over the telephone.

Between settlement and the 1920s, there were some dirt roads in the marsh. Grizzly Island, for instance was connected to the roads near Birds Landing with a self-service ferry. The Montezuma Slough Bridge was finally completed in December of 1960.

Grammar schools were located in the Marsh, but the school vacation was in the winter because then the roads were too muddy to travel to school. For junior high and high school the kids went to Collinsville by boat and then took the school bus to Rio Vista where they had a traditional summer vacation.

Dutton's Landing was a major early center of activity. It was on the major water route between Sacramento and San Francisco, and it was a major shipping point for Suisun Marsh. There was also a launch

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service in Suisun. Salt water intrusion into the Marsh resulted in gradual abandonment of most agriculture in the Marsh. The population of the Marsh was heavily Portuguese though Chinese laborers worked on levee construction.

The evolution of land use in Suisun Marsh tended to be: farming, hay production, grazing, and then wetlands management. While hunting clubs existed as early as the 1880s, wetlands management of the marsh for waterfowl production began in the 1920s and 1930s, and more hunting clubs began to move into the area. The Frost Ranch on Grizzly Island is among the last remaining agriculture in the Marsh proper. Until recently the Frost Ranch grazed its cattle on salt grass which it was able to irrigate using traditional methods and the brackish water of the marsh. During recent dry years, however, the water has been too salty to use on the Ranch's lands. While there is this limited grazing on salt grass in the Marsh today,²⁰ the Marsh is largely devoted to duck clubs and the California Department of Fish and Game's Grizzly Island Wildlife Refuge. From 1947 to the late 1960s Montezuma Harbor catered to sportsmen in the area. In 1978 the only remnants were a few pilings at the site.²¹

In 1927 the State of California purchased Joice Island from Andy Mahoney who previously raised cattle on it. It became the first state owned refuge in Suisun Marsh. Then the Grizzly Island Wildlife Refuge was established in 1951 on 8,600 acres. The core of that original purchase was focussed on the Fontana Farm which raised cattle, small grain (barley), and asparagus. Three thousand acres of the Fontana Farm were cultivated before acquisition in 1951. The refuge now contains 14,800 acres. Dennis Becker, the Area Manager of the Refuge guesstimates that 50% of the 55,000 acres in the Marsh now were cultivated at some time.²²

The modern delta is characterized by a population decline as younger residents relocate to cities and towns. The delta, however, still continues to produce great amounts of food. That production is often fed into processing centers in the Sacramento and Stockton area. The delta carries with it, too, the ethnic diversity which was established there as early as the 1870s and which was characterized by ethnic specializations. Anglo-Americans and northern Europeans tended to work in grain, fruit, and livestock. Tenants at first, the Chinese, Italian, and Portuguese residents specialized in truck farming. Before World

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War I the Japanese and Indian Hindus in the delta specialized in asparagus production while they were later supplanted by Filipino farmers. While the fruit harvest before World War II was dependent on Chinese and Japanese labor, this labor became a Mexican specialization after that. Sugar beets were always a Mexican activity. The Chinese, a major labor element in the Nineteenth Century, tended to specialize in potato and bean cultivation.²³

Development of the Central Valley, beginning in the 1930s, profoundly affected the delta area. At that time the Central Valley Project was authorized by the Federal government as both a water management project and as a means of providing relief employment during the Great Depression. In addition to the Central Valley Project, there were other water projects in the Central Valley. As a result of that active development of the Central Valley there are some 20 major projects which have a capacity of 200,000 acre feet or more of water. These projects were designed to provide water for the massive increase in irrigated land in the Central Valley as-well-as the burgeoning population of California. The reduced flow of water combined with the reduced amount of overflow lands in the delta because of Reclamation radically altered the regimen of this riverine delta and the Suisun Marsh.

Now the Suisun Marsh area contains the largest area of the delta which is not in agricultural production though about 90 percent of the Marsh is behind levees.²⁴ This Marsh is of great concern to conservationists because of salt water intrusion which accelerated as water ran off faster and in less volume. The salt water intrusion disrupts the production of food for waterfowl and also disrupts the migration of anadromous salmon and striped bass through the area. This is an extremely important area for support of waterfowl on the Pacific Flyway and for the production of fish.²⁵

Altogether, Suisun Marsh presents an interesting history. The Marsh itself was likely exploited for its animal and fish resources in the prehistoric and early historic phases of its history. Settlement and through transportation networks during both the Mexican and American periods tended to hug the edges of the Marsh while the Marsh itself was avoided. As farmers filled the need to feed miners in the gold rush, the rich soils of the delta and Marsh attracted settlers who began to protect the land from flooding and clear and cultivate the land. Transportation in the delta area continued to be largely by water in the maze of sloughs and river

channels until the 1920s. In the 1920s the last major reclamation efforts in the delta occurred at the same time that the automobile combined with a much improved road system to begin supplanting the dominance of water transportation. The 1920s were also near the end of Suisun Marsh's fully productive agricultural years and of a denser agricultural settlement pattern. While the delta as a whole is a very rich and productive agricultural area today, the Suisun Marsh contains the largest non-agricultural area in the delta. That makes it the largest contiguous estuarine marsh remaining in the United States - in spite of the fact that it is now about one/seventh its original size of 750,000 acres.²⁶

In terms of management of cultural resources affected by projects in Suisun Marsh, the history of the area gives us clues about types of cultural resources that should be anticipated in the area. Cultural resources management in the Marsh, however, must be approached cautiously because this list may not be complete. We know from the historical record, for instance, that American Indians lived in the area and that there were "Indian mounds." During reclamation of the Marsh, we know that levees, levee protection, drainage ditches, and landings were built. In terms of settlement on the Marsh we can presume the presence of small settlements [like Dutton's landing and Montezuma [Beldon's] Landing], residences, farm buildings and other agricultural structures, possibly churches and cemeteries, schools, possibly commercial structures such as packing sheds or canneries, and special purpose agricultural structures. In terms of transportation systems there might be roads, bridges, ferry landings, steamboat and launch landings. Historical archeological remains of camps for levee and other construction, of farmsteads, and of small settlements might be particularly interesting if they still exist. Those historical archeological remains might address research questions about ethnic diversity and ethnic adaptations to both the agriculture of the Marsh and the culture of the United States. The Chinese, for instance, had special temporary tent camps that were used during levee construction.

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FOOTNOTES

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OTHER SOURCES NOT INVESTIGATED

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The Sacramento River Delta Historical Society in Locke, California, may have useful information.

The California State Archives identified resources in its collections which might be useful. A copy of their FAX to me while I was in the Pacific Northwest Office is attached.

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Benicia Public Library is at 144 East G. Street. Its hours are variable depending on the day of the week. Phone (707) 421-6500. This library has some local materials but is somewhat dubious about having materials on Suisun Marsh.

The Solano County Library is at 1150 Kentucky Street in Fairfield. Its hours are variable depending on the day of the week. Phone (707) 745-2265. This appears to be the most likely repository with a collection on the history of the area.

The Grizzly Island Wildlife Area (California State office) may have an overview or helpful information. Its phone number is (707) 425-3828. It is located on Grizzly Island. Bob Smith is the manager of the area.

The Suisun Marsh Natural History Association may also have useful information. Its phone number is (707) 429-4295. It is located at 1171 Kellogg in Suisun. Executive Director - Monique Ligouri.

The Solano County Farmlands and Open Space Foundation is another possible source of information. It has done a study titled "Rush Ranch Enhancement and Management Plan" in 1990. Rush Ranch is in the Potrero Hills adjacent to Suisun Marsh. The Ranch had a landing on Suisun Slough. Phone is (707) 428-7580. It is located at 720 Webster Street, Fairfield 94533. The contact is Neil Havlik. (I have talked to Havlik who informs me they don't have any written overviews or anything of that sort. I leave this in as a place to be

explored further).

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